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09/871,401	05/31/2001	Scott C. Johnson	SURG:157	2094

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EXAMINER

SHINGLES, KRISTIE D

ART UNIT	PAPER NUMBER
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2141

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/871,401

Applicant(s)

JOHNSON ET AL.

Examiner

Kristie Shingles

Art Unit

2141

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 5/31/01 & 8/23/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 133-211 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 133-211 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05/31/2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2/15/02, 6/25/02
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

*This Office Action is in response to the Preliminary Amendment filed on March 31, 2001.*

### ***Response to Amendment***

*Applicant has cancelled claims 1-132 and added claims 133-211, thus claims 133-211 are now pending.*

### ***Response to Arguments***

1. Applicant's arguments filed on 8/23/04 with respect to the rejection of cancelled claims 1-132 have been fully considered and are persuasive. The rejection is therefore moot and has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Allen, Jr. et al (U.S. 6,404,752) and Bernabeu-Auban et al (U.S. 5,805,572) for additional claims 133-211.

### ***Drawings***

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 32, 64, 1060A, and 1060B. Corrected drawing sheets, or amendment to the specification to add the reference character(s) in the description, are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended.

Art Unit: 2141

The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Double patenting***

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 133-167, 169-181, 182-197, 198-203, 205 and 206-211 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 53-87, 89-101, 103-118, 121-126, 120 and 127-132 of copending Applications No. 09/797,413. Although the conflicting claims are not entirely identical, they are not patentably distinct from each other because they recite system, methods, and means that are substantially equivalent and that would have been obvious to one of ordinary skill in the art.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Specification***

5. The disclosure is objected to because of the following informalities: missing punctuation on pg.30 line 27. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 133, 140, 141, 143-145, 150, 151, 157, 158, 167-172, 175-179, 181-185, 188-192 and 194-211 are rejected under 35 U.S.C. 102(e) as being anticipated by Allen, Jr. et al (U.S. 6,404,752).

- a. Per claim 133, Allen, Jr. et al teach method of configuring a network switch, comprising:

- providing a plurality of separate processor engines, the processor engines being assigned separate tasks in an asymmetrical multi-processor configuration (col.5 line 66-col.6 line 27, col.7 lines 16-39, and col.21 line 58-col.23 line 66; plurality of separate processor engines assigned separate tasks i.e. network processor, storage processors, etc);

Art Unit: 2141

- providing an interface connection to at least one of the processor engines to couple the network switch system to a network (Fig.2, col.2 lines 47-62, col.5 line 66-col.6 line 22; makes use of a switch fabric with interface for connection); and
- generating an accelerated data flow through the network switch (Abstract and col.1 lines 27-38; provides for a media speed network switch).

b. Per claim **151, 140, 150 and 157**, Allen, Jr. et al teach a method of providing a network switching system through the use of a network connectable computing system, comprising:

- providing a plurality of separate processor engines, the processor engines being assigned separate tasks in an asymmetrical multi-processor configuration (col.5 line 66-col.6 line 27, col.7 lines 16-39, and col.21 line 58-col.23 line 66; plurality of separate processor engines assigned separate tasks);
- providing a storage processor engine, the storage processor engine being one of the plurality of separate processor engines (col.23 lines 46-63; Datastore Coprocessor functions as storage processor engine);
- providing a network interface connection to at least one of the processor engines to couple the network switching system to a network (Fig.2, col.2 lines 47-62, col.5 line 66-col.6 line 22, col.5 lines 14-25 and col.6 lines 23-63; makes use of a switch fabric with interface for connection);
- providing a storage interface connection to the storage processor engine to couple the storage processor engine to a content storage system (col.6 lines 23-63, col.13 lines 29-47, col.20 lines 15-24, col.21 line 16-col.22 line 47; network processor provides content delivery and has a network interface connection to storage processor engine and other processors); and
- accelerating content delivery through the network switching system (col.1 lines 27-38, col.3 lines 1-5 and col.4 lines 44-52; use of network processor and media speed switch provides high and fast performance forwarding).

c. Per claims **167, 181, 169, 170, 182 and 183**, Allen, Jr. et al teach a network connectable switching system, comprising:

Art Unit: 2141

- a first processor engine (Fig.2, col.4 lines 40-53, and col.6 lines 23-63; the network processor acts as first processor engine);
- a second processor engine, the second processor engine being assigned types of tasks different from the types of tasks assigned to the first processor engine (col.11 lines 13-25; system processor performs initialization and configuration services);
- a third processor engine, the third processor engine being assigned types of tasks that are different from the types of tasks assigned to the first and second processor engines (col.7 lines 16-39 and col.23 lines 20-63; protocol processors, application processors and Datastore Coprocessor engine perform different tasks); and
- a distributed interconnection coupled to the first, second and third processor engines, the tasks of the first, second and third processor engines being assigned such that the system operates in staged pipeline manner through the distributed interconnection to perform a switching function (col.3 lines 1-5, col.20 lines 59-64, and col.24 lines 36-51; system includes 3-stage pipeline and bus-structured interconnects which allow for distributed interconnection).

d. Claim 168 contains limitations substantially equivalent to Claim 133 and is therefore rejected under the same basis.

e. Per claims 194, 141, 143, 145, 158, 195-198 and 204-206, Allen, Jr. et al teach a network connectable switching system, comprising:

- a first processor engine (Fig.2, col.4 lines 40-53, and col.6 lines 23-63; the network processor acts as first processor engine);
- a second processor engine, the second processor engine being assigned types of tasks different from the types of tasks assigned to the first processor engine (col.11 lines 13-25 and col.23 lines 20-45; system processor performs initialization and configuration services);
- a third processor engine, the third processor engine being assigned types of tasks that are different from the types of tasks assigned to the first and second processor engines (col.7 lines 16-39 and col.23 lines 20-63; protocol processors, application processors and Datastore Coprocessor engine perform different tasks); and
- a distributed interconnection coupled to the first, second and third processor engines, the tasks of the first, second and third processor engines being assigned such that the system operates in staged pipeline manner through the distributed

interconnection, wherein at least one of the first or second processor engines performs system management functions so as to off-load management functions from the other processor engines (col.2 lines 31-37, col.3 lines 1-5, col.4 lines 48-57, col.5 lines 1-13, col.5 lines 49-65, col.20 lines 59-64, and col.24 lines 36-51; system include 3-stage pipeline and bus-structured interconnects which allow for distributed interconnections, control point processor provides system management, management and network processor implementation also allows for load-balancing).

f. Per claim **144**, Allen, Jr. et al teach the network switch of Claim 143, wherein the distributed interconnection comprises a switch fabric (col.2 lines 47-62, col.5 line 66-col.6 line 22; makes use of a switch fabric).

g. Claims **175** and **188** contain limitations substantially equivalent to Claim 144 and are therefore rejected under the same basis.

h. Claims **176** and **189** contain limitations substantially equivalent to Claims 167 and 181 and are therefore rejected under the same basis.

i. Per claims **201-203** and **209-211**, Allen, Jr. et al teach the network connectable switching system of Claims 194 and 197, wherein the network processor filters data incoming to the network endpoint system from the network (col.2 lines 47-67; performs data filtering functions via packet classification, management, forwarding, and modification).

j. Per claims **171**, Allen, Jr. et al teach the system of Claim 167, wherein at least one of the first, second or third processor engines comprises multiple processor modules operating in parallel (col.3 lines 1-14; provides for a parallel architecture).

k. Claims **177**, **178**, **184**, **185**, **190** and **191** contain limitations substantially equivalent to Claim 171 and are therefore rejected under the same basis.



Art Unit: 2141

l. Claims **179** and **192** contain limitations substantially equivalent to Claims 167 and 181 and are therefore rejected under the same basis.

m. Per claim **172**, Allen, Jr. et al teach the system of claim 171, wherein the application processor engine comprises multiple processor modules operating in parallel and the storage processor engine comprises multiple processor modules operating in parallel (col.10 line 56-col.11 line 5 and col.28 line 56-col.29 line 6; incorporates the use of multiple modules and the Datastore Coprocessor).

n. Per claims **199, 200, 207** and **208**, Allen, Jr. et al teach the systems of Claims 194 and 197, wherein the system management functions comprise quality of service and service level agreement functions (col.2 lines 31-46; QoS and authentication comprise service level agreements).

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims **134-139, 142, 146-149, 152-156, 159-166, 173, 174, 180, 186, 187** and **193** are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen, Jr. et al in view of Bernabeu-Auban et al (U.S. 5,805,572).

a. Per claims **134, 135, 142, 146, 152, 153, 159, 160, 163, 173, 180, 186** and **193**, Allen, Jr. et al teach from above the implementation a network switching system/method comprising the interconnection of multiple processors including: network processors, application processors, system processors, and storage processors, however, Allen, Jr. fails to teach the system operating in a peer-to-peer environment. Nonetheless, Bernabeu-Auban et al teach a network system of multiple processors connected in peer-to-peer connectivity, which includes packet filtering, and load balancing (col.1 lines 35-42 and col.2 lines 23-58).

It would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to account for additional networking architectures including peer-to-peer configuration for the purpose of scalability and expansion over other networks. One skilled in the art would have been motivated to generate the claimed invention with a reasonable expectation of success.

b. Claims **155** and **162** contain limitations substantially equivalent to Claim 151 and are therefore rejected under the same basis.

c. Claims **136, 154, 161, 174** and **187** contain limitations substantially equivalent to Claim 144 and are therefore rejected under the same basis.

d. Claim **137** contains limitations substantially equivalent to Claim 133 and is therefore rejected under the same basis.

e. Claims **138, 147, 156** and **164** contain limitations substantially equivalent to Claim 194 and are therefore rejected under the same basis.

f. Claim **139** contains limitations substantially equivalent to Claim 133 and is therefore rejected under the same basis.

Art Unit: 2141

g. Per claims 148 and 165, Allen, Jr. et al teach the method of claims 147 and 164, further comprising tracking system performance within the system management processor engine (col.11 lines 26-31; traffic management scheduler and control block function as tracking system).

h. Per claims 149 and 166, Allen, Jr. et al teach the method of claims 147 and 165, further comprising implementing system policies with the system management processor engine (implementing system policies; col.2 lines 47-58; performs policy management).

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Fletcher (U.S. 6,072,797) discloses methods, apparatus and computer program products for aggregated transmission groups in high-speed networks.

b. Broockman et al (U.S. 6,463,064) disclose a method and apparatus interconnection of local area networks with wide area networks.

c. Naveh et al (U.S. 6,466,984) disclose a method and apparatus for policy-based management of QoS treatments of network data traffic flows by integrating policies with application programs.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristie Shingles whose telephone number is 703-605-4244 (or

Art Unit: 2141

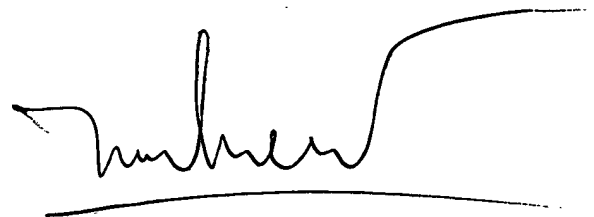
571-272-3888 after 10/26/04). The examiner can normally be reached on Monday-Friday 8:30-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 703-305-4003. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kristie Shingles  
Examiner  
Art Unit 2141

kds

A handwritten signature in black ink, appearing to read 'Le Hien Luu', with a long horizontal line extending to the right.

LE HIEN LUU  
PRIMARY EXAMINER